

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
28 July 2005 (28.07.2005)

PCT

(10) International Publication Number
WO 2005/068688 A3

(51) International Patent Classification⁷: C25D 3/56, 3/52,
G11B 5/858, H01F 10/14

(21) International Application Number:
PCT/JP2005/000732

(22) International Filing Date: 14 January 2005 (14.01.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2004-009238 16 January 2004 (16.01.2004) JP
2004-271466 17 September 2004 (17.09.2004) JP

(71) Applicant (for all designated States except US): CANON
KABUSHIKI KAISHA [JP/JP]; 3-30-2, Shimomaruko,
Ohta-ku, Tokyo, 1468501 (JP).

(72) Inventors; and

(75) Inventors/Applicants (for US only): ICHIHARA,
Shigeru [JP/JP]; c/o CANON KABUSHIKI KAISHA,
3-30-2, Shimomaruko, Ohta-ku, Tokyo, 1468501 (JP).
DEN, Tohru [JP/JP]; c/o CANON KABUSHIKI
KAISHA, 3-30-2, Shimomaruko, Ohta-ku, Tokyo,
1468501 (JP). YASUI, Nobuhiro [JP/JP]; c/o CANON
KABUSHIKI KAISHA, 3-30-2, Shimomaruko, Ohta-ku,
Tokyo, 1468501 (JP).

(74) Agents: OKABE, Masao et al; No. 602, Fuji Bldg., 2-3,
Marunouchi 3-chome, Chiyoda-ku, Tokyo, 1000005 (JP).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG,
KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG,
MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH,
PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ,
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,
ZM, ZW

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG).

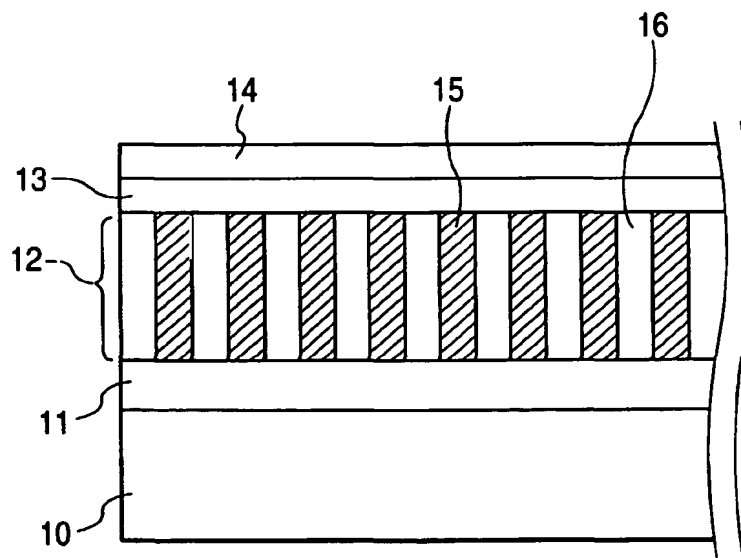
Published:

— with international search report

(88) Date of publication of the international search report:
2 March 2006

[Continued on next page]

(54) Title: PLATING SOLUTION, PROCESS FOR PRODUCING A STRUCTURE WITH THE PLATING SOLUTION, AND
APPARATUS EMPLOYING THE PLATING SOLUTION



(57) Abstract: A stable FePt plating solution is provided. Further a process for electroplating is provided for producing an FePt magnetic material having especially strong coercive force and excellent properties by use of the plating solution. The plating solution contains ionic Fe, ionic Pt, and a complex agent, at a molar ratio (Fe/Pt) of the ionic Fe to the ionic Pt ranging from 0.75 to 3.

WO 2005/068688 A3



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.